

Monitoring Data Record

Project Title: R-2417BA (Sites 14 and 22) COE Action ID: 2002-2-0899

Stream Name: UT Bull Run DWQ Numbers: 001432

City, County and other Location Information: Lee County, US 421-NC 87 Sanford Bypass from East of US 1-15-501 to East of SR 1521

Date Construction Completed: Site 14 (May 2003) & Site 22 (April 2004)

Monitoring Quarter: ( 6 ) of 8

Ecoregion: \_\_\_\_\_ 8 digit HUC unit: 03030004

USGS Quad Name and Coordinates: \_\_\_\_\_

**Rosgen Classification:** \_\_\_\_\_

Length of Project: 144' Urban or Rural: Rural Watershed Size: \_\_\_\_\_

Monitoring DATA collected by: M. Green and J. Young Date: 8/7/07

**Applicant Information:**

Name: NCDOT Roadside Environmental Unit

Address: 1425 Rock Quarry Rd. Raleigh, NC 27610

Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us

**Consultant Information:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Email address: \_\_\_\_\_

**Project Status:** Complete

**Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.):** Level 1 2 3

Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

**Permit States:** The permittee will visually monitor the vegetative plantings on all mitigation streambanks to access and insure complete stabilization of the mitigation stream segments. This monitoring will include adequate visual monitoring of planted vegetation quarterly for a minimum of two years after final planting, and appropriate remedial actions (e.g., replanting, streambank grading, ect.). If within any monitoring year, bank stabilization is not acceptable as determined by the Corps of Engineers, and remedial action required by the Corps of Engineers is performed, the two year monitoring of the affected portions of the stream will begin again.

Section 1. PHOTO REFERENCE SITES

**Total number of reference photo locations at this site:** Site 14: 1 photo point, 2 photos at this photo point location Site 22: 2 photo points, 2 photos at each photo point location

**Dates reference photos have been taken at this site:** 5/1/06, 8/24/06, 11/28/06, 2/7/07, 5/21/07, 8/7/07

**Individual from whom additional photos can be obtained (name, address, phone):** \_\_\_\_\_

**Other Information relative to site photo reference:** \_\_\_\_\_

If required to complete Level 3 monitoring only stop here; otherwise,

**Section 2. PLANT SURVIVAL**

**Attach plan sheet indicating reference photos.**

Identify specific problem areas (missing, stressed, damaged or dead plantings):

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Estimated causes, and proposed/required remedial action:

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ADDITIONAL COMMENTS: Seedlings noted on the streambank and in the floodplain consisted of black willow, silky dogwood, willow oak, water oak, tulip poplar, alder, white oak, green ash, and red maple. Other vegetation noted consisted of *Juncus* sp., cattail, lespedeza, fennel, sedge, pokeweed, jewelweed, goldenrod, woolgrass, briars, and various grasses.

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If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

### Section 3. CHANNEL STABILITY

**Visual Inspection:** The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

Site 14 stream relocation at Sta. 133+90 LT. has a slight headcut where the relocated stream ties back to the existing stream. The site is stabilized and will continue to be monitored.

Site 22 stream relocation at Sta. 146+00 RT. has two cross vanes that were constructed without filter fabric per the plans. Water is currently flowing through the structures. There has been some localized erosion but the site has stabilized with vegetation. NCDOT will continue to monitor the site.

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Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type	Crossvanes @ Sta. 146+00 RT.	Stream @ Sta. 133+90 LT.			
Is water piping through or around structure?	Water is piping through crossvanes				
Head cut or down cut present?	Slight Headcut	Slight Headcut			
Bank or scour erosion present?					
Other problems noted?					

**NOTE:** Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

# Site 14



Photo 1



Photo 2

# Site 22



Photo 1



Photo 2



Photo 3



Photo 4